

## METHOD FOR MEASURING A SOUND SIGNAL PROPAGATION DELAY IN A FLUID BY ZERO-CROSSING OF THE SAID SOUND SIGNAL

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The invention features a method for measuring a sound signal propagation delay between two remote transducers placed in a fluid flow, that consists in sampling and digitizing each sound signal received, in determining for each sampled and digitized period of the said signal the maximum amplitudes P- and P+ of the two lobes of the period of interest, in comparing the ratio of these amplitude to a theoretical amplitude ratio between the maximum amplitudes Pi- and Pi+ of the two lobes of an ideal characteristic first period determining the first zero-crossing of the characteristic oscillations of the signal and, based on the result of this comparison relative to a threshold value GS, in considering the said period of interest as a characteristic period or not, and in determining the zero-crossing of this characteristic period between two lobes or not.

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